REMARKS

Claims 1-26 are pending in the present application. By this response, claims 1, 10, 14, 21, 25 and 26 are amended for clarification of the subject matter being claimed. In view of the above amendments and the following remarks, reconsideration of the claims is respectfully requested.

I. Examiner Interview

Applicants thank Examiner Siddiqi for the courtesies extended Applicants' representatives during the May 20, 2004 telephone interview. During the interview, Examiner Siddiqi indicated that the above amendments would overcome the Chatwani reference. Therefore it is Applicants understanding that, pending an update search by Examiner Siddiqi, the present claims are now in condition for allowance. The substance of the interview is summarized in the remarks of Section II, which follows.

II. 35 U.S.C. § 102, Alleged Anticipation, Claims 1-26

The Office Action rejects claims 1-26 under 35 U.S.C. § 102(b) as being anticipated by Chatwani et al. (U.S. Patent No. 5,729,685). This rejection is respectfully traversed.

As to claims 1, 14 and 25, the Office Action states:

> Chatwani discloses a method for retrieving client boot information in a network environment with multiple boot servers (col 4, lines 15-18), comprising:
>
> sending an initial request for client configuration (col 26, lines 12-16) information (fig 2, element 203, col 23, lines 39-40) to a first boot server (col 34, lines 35-36);
>
> if the client configuration information (col 26, lines 12-16) is not found (col 32, lines 65-67, correct information must be checked during the process) on the first boot server, sending a list request for a boot server list (col 33, lines 16-54, first to next shows the order) to the first boot server (col 12, lines 5-6);
>
> receiving the boot server list; and

> sending a configuration information request (col 26, lines 12-16) for the client configuration (col 26, lines 12-16) information to each server (col 12, lines 5-6) in the boot server list (col 33, lines 16-54, first to next shows the order) until the client configuration information is found (col 32, lines 65-67) or a request has been sent to every server in the boot server list (col 33, lines 16-54, first to next shows the order).

Office Action dated March 11, 2004, pages 2-3.

Claim 1, which is representative of the other rejected independent claims 14 and 25 with regard to similarly recited subject matter, reads as follows:

> 1. A method for retrieving client boot information in a network environment with multiple boot servers, comprising:
>
> sending from a client an initial request for client configuration information to a first boot server;
>
> if the client configuration information is not found on the first boot server, sending from the client a list request for a boot server list to the first boot server;
>
> receiving at the client the boot server list; and
>
> sending from the client a configuration information request for the client configuration information to each server in the boot server list until the client configuration information is found or a request has been sent to every server in the boot server list.

A prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if every element of a claimed invention is identically shown in that single reference, arranged as they are in the claims. In re Bond, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990). All limitations of the claimed invention must be considered when determining patentability. In re Lowry, 32 F.3d 1579, 1582, 32 U.S.P.Q.2d 1031, 1034 (Fed. Cir. 1994). Anticipation focuses on whether a claim reads on the product or process a prior art reference discloses, not on what the reference broadly teaches. Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 218 U.S.P.Q. 781 (Fed. Cir. 1983). Applicants respectfully submit that Chatwani does not identically show each and every feature of the claims arranged as they are in the claims. Specifically, Chatwani does not teach sending from a client an initial request for client configuration information to a first boot server, if the client configuration information is not found on the first boot server, sending from the client a list request for a boot server list to the first boot server, receiving at the client the boot server list, and sending from the client a configuration

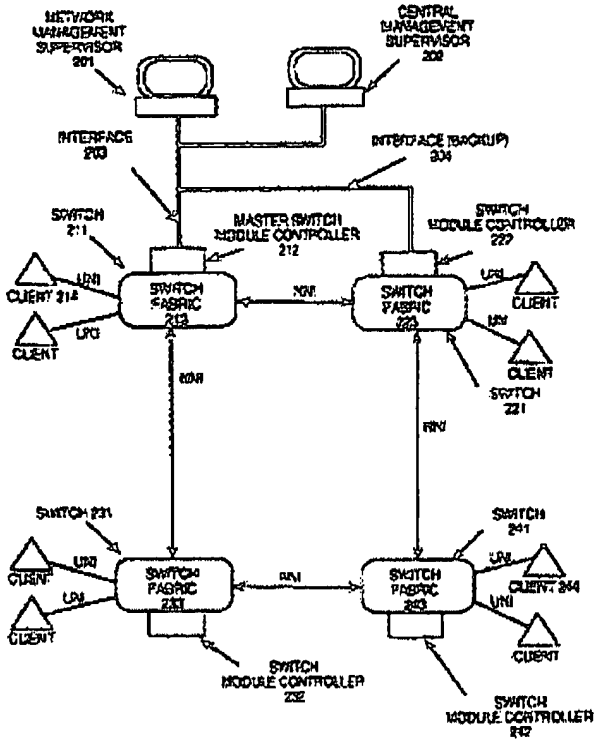
information request for the client configuration information to each server in the boot server list until the client configuration information is found or a request has been sent to every server in the boot server list.

Chatwani is directed to a method for automatically determining the topology of the network. Chatwani provides for each switch in the network, transmitting on each of its ports, link advertisement messages. The link advertisement messages are received by neighbor switches and forwarded to a topology manager. The topology manager constructs network topology profile information based on received link advertisement messages. Further, the topology manager is able to verify bi-direction links based on the received link advertisement messages.

There is nothing in any section of Chatwani that teaches sending from a client an initial request for client configuration information to a first boot server. The Office Action alleges that this feature is taught by Chatwani at column 26, lines 12-16, Figure 2, element 203, column 23, lines 39-40 and column 34, lines 35-36, which are shown as follows:

> Assume that client C1 1402 has provided its logical address as "C1" and client C2 1403 has provided its logical address as "C2". Further assume that client C1 1402 is attached to port 1 of switch Y 1401 and client C2 1402 is attached to port 2 of switch Y 1401. The CMS may then store information providing a one-to-one correspondence between the logical addresses of the clients and their network physical attachment in a client address/location table such as illustrated below.

(Column 26, lines 12-16)



(Figure 2)

A client attempts registration by transmitting a client registration request (CRR) in the format given by FIG. 15(b), block 1602 (this format will be discussed in greater detail below).

(Column 23, lines 39-40)

The CMS receives the request (over the neighbor's VSP as has been described), block 2602, and the CMS formats a TFTP request and forwards the request to the boot server, block 2603.

(Column 34, lines 35-36)

In column 26, lines 12-16, Chatwani is describing a Central Management Supervisor that stores information pertaining to the physical network attachment and logical address of client computers. In Figure 2, element 203 is described in the Chatwani reference as an Ethernet link. In column 23, lines 39-40, Chatwani is describing a client registration request that is transmitted by the client through a originating switch, intermediate switches, and a master switch, to the Central Management Supervisor (CMS). The CMS is a management unit which is capable of receiving, storing and displaying topology

information. In column 34, lines 35-36, Chatwani is describing that the CMS receives a request, from a booting switch, for transmission of its booting file. The CMS formats the request and sends it to the boot server. The boot server then sends, to the CMS, the boot code for the booting switch, and the CMS transmits the boot code to the booting switch. Nowhere in these sections, or any other section of Chatwani, does a client send an initial request for client configuration information sent to a first boot server.

Furthermore, Chatwani does not teach sending from the client a list request for a boot server list to the first boot server, if the client configuration information is not found on the first boot server. The Office Action alleges that this feature is taught at column 26, lines 12-16 (shown above), column 32, lines 65-67, column 33, lines 16-54 and column 12, lines 5-6, which read as follows:

> The CMS will use the information regarding the physical address, hardware version and firmware version to determine the correct boot download file for use by the booting switch.

(Column 32, lines 65-67)

> FIG. 21(h) illustrates the format of the BFQ message as it is received by the CMS. As can be seen, the message is unchanged from the format of FIG. 21(g) except for the VPI field 112, 113 being changed as it is transmitted along the neighbor's VSP, from one intermediate switch to the next intermediate switch and finally to the master switch, where the field is translated by the master's switch fabric to indicate a value which uniquely identifies the neighbor switch. Again, in the described system, this value is simply the switch number of the neighbor switch although in other embodiments it may be a different value in which case there would be a requirement for a mapping table or the like at the CMS to allow the CMS to identify the neighbor switch. It is advantageous to not require the mapping table at least in that more efficient processing can be provided because there is not a need to look up a value in the table.
>
> FIG. 21(i) illustrates the format of a BFR message as it is transmitted by the CMS. As discussed above, the BFR message provides the booting switch with information identifying the boot server and boot file selected by the CMS for booting the booting switch. The boot server is identified in field 2151 and the boot file name is provided in field 2152. Field 2150 provides identification of the output port on which the corresponding BFQ message was transmitted by the booting channel. This field is simply echoed by the CMS from field 2140 of the received BFQ message. The BFR message also provides the booting switch's IP address in field 2154 if the booting switch had set field 2125 to zero. The IP

address is assigned by the CMS from a configuration file based on the physical address of the booting switch.

The VPI field 112, 113 is set to indicate the VSP of the neighbor switch and the VCI field 114, 115, 116 is set to indicate the boot service channel number followed by the port number on which the corresponding BFQ was transmitted.

(Column 33, lines 16-54)

(3) boot services allowing a controller to download software from the supervisor 202 or from a boot file server.

(Column 12, lines 5-6)

In column 26, lines 12-16, Chatwani is describing a Central Management Supervisor that stores information pertaining to the physical network attachment and logical address of client computers. In column 32, lines 65-67, Chatwani is describing that the CMS uses the physical address, hardware version and firmware version to determine the correct boot download file for use by the booting switch. In column 33, lines 16-54, Chatwani is describing the Boot File Query of the CMS to the boot server, when the booting switch is querying for its initialization boot code. Additionally, the lookup table described by Chatwani is a table of the switches from the origination switch through intermediate switches to the master switch. This table of switches is not a list request for a boot server list to the boot server, but a request for the boot code for a switch in a particular path from originating switch to the master switch, including any intermediate switches in the path. In column 12, lines 5-6, Chatwani is describing the CMS services which includes providing boot services allowing the CMS to download boot code from the boot server to a booting switch. There is nothing in these sections, or any other section of Chatwani, that teaches sending from the client a list request for a boot server list to the first boot server, if the client configuration information is not found on the first boot server.

Still further, Chatwani does not teach receiving at the client the boot server list. The Office Action fails to provide a section where Chatwani teaches this feature. As shown above, Chatwani teaches a boot server that provides the boot code to a booting switch in response to a booting server requesting its boot code. The only list provided by the Chatwani reference is the table of switches in a particular path from the originating

switch to the master switch, including any intermediate switches so the boot code may be transmitted back to the requesting booting switch.

Finally, Chatwani does not teach sending from the client a configuration information request for the client configuration information to each server in the boot server list until the client configuration information is found or a request has been sent to every server in the boot server list. The Office Action alleges that this feature is taught by Chatwani at column 26, lines 12-16, column 12, lines 5-6, column 33, lines 16-54 and column 32, lines 65-67, shown above. As shown above, Chatwani does not send a configuration information request from a client, rather, forwards a boot switch configuration request from the CMS to the boot server. While Chatwani may contain some of the particular elements of the present invention, the elements that do appear in the Chatwani reference are not arranged as they are in the claims.

Chatwani simply is not relevant to the claimed invention beyond merely mentioning some of the elements of the presently claimed invention. That is, Chatwani does not teach so much as one feature of the claimed invention. Chatwani makes no mention of an initial request for client configuration information sent to a first boot server, sending a list request for a boot server list to the first boot server, if the client configuration information is not found on the first boot server, receiving the boot server list, and sending a configuration information request for the client configuration information to each server in the boot server list until the client configuration information is found or a request has been sent to every server in the boot server list. Thus, Applicants respectfully submit that Chatwani does not teach all of the features of independent claims 1, 14 and 25.

Independent claims 10, 21 and 26 recite similar features in their respective claim terminology. Claim 10, which is representative of the other rejected independent claims 21 and 26 with regard so similarly recited subject matter, recites "receiving at a boot server an initial request for client configuration information from a client, if the client configuration information is not found, sending from the boot server an error message that indicates that the client information is not found, receiving at the boot server a list request for a boot server list from the client, and sending from the boot server the boot server list to the client."

Thus, Chatwani does not teach each and every feature of independent claims 1, 10, 14, 21, 25 and 26 as is required under 35 U.S.C. § 102. At least by virtue of their dependency on independent claims 1, 10, 14 and 21, Chatwani does not teach each and every feature of dependent claims 2-9, 11-13, 15-20 and 22-24. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 1-26 under 35 U.S.C. § 102.

Furthermore, Chatwani does not teach, suggest or give any incentive to make the needed changes to reach the presently claimed invention. Absent the Examiner pointing out some teaching or incentive to implement Chatwani such that an initial request for client configuration information sent to a first boot server, a list request for a boot server list is sent to the first boot server, if the client configuration information is not found on the first boot server, receiving the boot server list, and sending a configuration information request for the client configuration information to each server in the boot server list until the client configuration information is found or a request has been sent to every server in the boot server list, one of ordinary skill in the art would not be led to modify Chatwani to reach the present invention when the reference is examined as a whole. Absent some teaching, suggestion or incentive to modify Chatwani in this manner, the presently claimed invention can be reached only through an improper use of hindsight using the Applicants' disclosure as a template to make the necessary changes to reach the claimed invention.

Moreover, in addition to their dependency from independent claims 1, 10, 14 and 21, Chatwani does not teach the specific features recited in dependent claims 2-9, 11-13, 15-20 and 22-24. For example, with regard to claims 3 and 16, Chatwani does not teach receiving, from the first boot server, an error message that indicates that the client information is not found on the first boot server. The Office Action fails to provide a section of Chatwani where this feature is taught but, rather, merely asserts that it is taught by Chatwani. As shown above, the boot server only provides boot code for booting switches. Moreover, there is no mention in the Chatwani reference for providing an error if the boot code for a switch is not present on the server. Thus, not only does Chatwani fail to teach a boot server that contains client configuration information, but fails to teach providing an error if a configuration is not present on the boot server.

As an additional example, with respect to claims 4, 5 and 17, Chatwani does not teach receiving the client configuration information from an associated boot server in response to the client configuration information being found, and sending a boot file request for remaining boot files to the associated boot server based on the client configuration information. As shown above, Chatwani simple does not provide client configuration information. Chatwani provides switch boot code to switches that are in the process of booting up.

Therefore, in addition to being dependent on independent claims 1, 10, 14 and 21, dependent claims 2-9, 11-13, 15-20 and 22-24 are also distinguishable over Chatwani by virtue of the specific features recited in these claims. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 2-9, 11-13, 15-20 and 22-24 under 35 U.S.C. § 102.

III. Conclusion

It is respectfully urged that the subject application is patentable over the prior art of record and is now in condition for allowance. The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

Respectfully submitted,

DATE: June 10, 2004

Francis Lammes

Francis Lammes
Reg. No. 55,353
Yee & Associates, P.C.
P.O. Box 802333
Dallas, TX 75380
(972) 367-2001
Agent for Applicants